THE GENESEE FARMER.

Vol. VI. ROCHESTER, AUGUST 13, 1836. No. 33.

Published by Luther Tucker.

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2,00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

☞ THE MONTHLY GENESEE FARMER is made up of selections from this paper, and published on the first of each month, forming, with Title-page and Index, an annual volume of 200 pages, at the low price of FIFTY CENTS a year, *payable always in advance.*

THE GENESEE FARMER.

SATURDAY, AUGUST 13, 1836.

Draining.

Every farmer must have observed, that the richest and most fertile material for soil is that which is deposited in swales, low grounds, and swampy places. This is so much the case that it is not an uncommon practice to go to such places for mud as manure. But, if instead of carting the mud from those places to dryer ground, they were rendered sufficiently dry themselves, by under-draining, for tillage, a most profitable and productive soil would be obtained at far less expense. A very large portion of our best soils are now lying either useless or yielding only inferior crops, in consequence of a super-abundance of water being allowed to remain upon them, when the evil might be remedied at a comparatively trifling cost. We have observed in that part of the country which is inclining to hilly, or what is termed rolling land, that the low wet places are generally not only the most fertile, but that the soil is there freest from stones; and the subsoil is also generally of almost pure sand, so that ditches may be cut through it with great expedition and ease. Much of our land might be increased five times in value by an expenditure of less than their present estimated worth. Judge Buel says, "The increased value of the *first*, or at all events that of the *two first* crops, has afforded *ample remuneration* for the expense of under-draining." His ground was a sandy loam, abounding in springs. Henry W. Delavan of Ballston, who has adopted the system of under-draining extensively on his farm of 250 acres, says, "I have applied under-draining to twenty different fields, to the extent of more than two thousand rods, and compute the average cost at half a dollar per rod. In some instances the state of my lands require an expenditure of at least twenty dollars per acre in draining. In such cases the production was coarse, unwholsome grasses, of little value, and tillage was quite out of the question. Twenty dollars per acre was the extent of the value of the land; whereas, after being effectually drained and cultivated, these lands have produced Indian corn, oats, wheat and clover, in great luxuriance, paying an interest of one hundred dollars the acre." "My belief is, that I have been *fully remunerated* by the *increased products of three years, in all cases.*"

Many farmers have attempted to drain their wet grounds, but by not pursuing the right course, nor doing the work thoroughly, they have partially if not entirely failed. Perhaps the most common error is making open, instead of covered drains. We have observed attempts to drain low grounds and swamps by a single shallow open ditch passing through the center. Such attempts must necessarily prove failures. In ordinary cases, drains should not be less than three feet deep. An open drain of this depth, if the sides have slope enough to prevent their falling in, must be nearly ten feet wide. Independently therefore of the great expense of digging such a one, it would occupy the ground most inconveniently. But a covered one, equally efficacious, may be cut, only two feet wide, and after it is filled occupy no ground whatever. Open drains should therefore never be made, except for carrying off streams and large quantities of surface water.

Another error is in not cutting drains in sufficient number, nor through the part of the ground where they are most needed. It not unfrequently happens that drains through the bottoms of swales and wet low grounds are found inadequate to rendering them dry, even when they are well made and numerously cut. This is often the case where the subsoil is hard and compact, and is near the surface. The rain falls upon the ground, penetrates to the subsoil, runs along its upper surface and oozes out at the sides of the declivities, down which it passes into the hollows below and overflows them. In such cases drains on the sides of these declivities will be needed. The best way of cutting them is to ascertain the points where the water oozes to the surface and mark them, and then to cut the ditch just above the line of these points; by this means the streams will be cut off and the sides of the declivity left dry. But it is necessary, if the soil be porous, that the ditch be cut deep enough to enter the subsoil, or else it will not cut off the streams, but they will still flow over its upper surface below the bottom of the ditch.

The materials employed for filling under drains must depend on circumstances. Where stones can be obtained they are doubtless the best. Where they are scarce and timber is abundant, the latter may be used to advantage. Slabs from the saw-mill may be made to answer a good purpose. Brush is also sometimes advantageously employed. Where the ground is hard and difficult to dig, it is very desirable that they may be filled with stone, in order that they may be permanent, and not require digging over again; and it commonly happens that on such soils stones are to be had in sufficient quantity. But in sandy ground where the digging is easy, and where stones are often scarce, timber and brush may be used; for should the drain require renewing in future years, the labor in such soils would be comparatively small. Judge Buel's method of filling brush drains is as follows:—"Take dwarf pines, the buts from three to six inches, cut them into lengths of four or five feet, and commencing at the upper end of the drain, proceed to lay them in regularly and compactly, the buts downward, in a sloping form, until the drain is filled. The trench is then apparently full. The brush are then brought within the edges, smoothly trod down, and the earth filled in. In a short time the whole of the brush is found to have settled below the reach of the plough." "Brush drains should be sunk so deep, as to have the brush, when pressed upon by the earth, at least six inches below the reach of the plough, otherwise they are liable to be disturbed and choked by the loose earth. The brush should be used in a green state, and with the leaves upon it if practicable, as in this condition it lasts much longer." "The whole of the excavated earth is thrown back upon the brush, forming a ridge, which in a short time settles to near the ordinary level." "I estimate the duration of this kind of drains at from 12 to 15 years, and there is no doubt of their proving efficient when well constructed, particularly when water is constantly passing through them.* Estimating all the labor, the average expense to me has been from 6 to 8 cents the yard."

Where stones are used to fill drains, there are various ways of placing them in. A common, and the simplest mode, is to throw them in promiscuously till the ditch is half filled; they are then covered with straw or inverted sod, and the rest filled with earth. Where the quantity of water is very small this way may answer, but we would recommend that an open underground channel of several inches aperture be always made for the passage of the water. Wherever a ditch is worth cutting, it is worth being well filled. There are several ways of forming this channel. One is as follows:—The sides of the drain are left sloping and meet at the center and bottom. Three flat stones are then taken, two of which are placed against the sides of the drain, meeting at the bottom, and a third caps the other two. A hollow triangular channel is thus left for the water, which can never become filled or stopped by the stones sinking in the ground, as they generally do in sandy soil; it is therefore particularly adapted for such soil.

Another and a more common way is to lay a row of stones on each side of the bottom, leaving a channel in the center, which is covered by large stones of a flat form; the ditch is then filled to a proper height by smaller stones thrown in promiscuously.—But in soft ground, as sand and bog earth, this channel would soon become choked by the stones settling in the ground; this however is at once effectually prevented by first laying a flat stone on the bottom of the drain, and then laying the rest, as before, upon them. This forms a permanent, stone-incased channel, which cannot become obstructed, and it possesses all the advantages of the three-cornered one just described, and requires a less number of flat stones for its construction, which is an advantage of some consequence, as they cannot always

* They have been known to last in some instances more than forty years.

be easily obtained. It also requires much less skill in laying the stones, as it is almost impossible to lay them wrong. This mode, which we prefer to all others, will be readily understood by the annexed figure.

Under-drains should in no case be less than three feet deep; in a sandy or pervious soil they should be deeper, in order to prevent mud and sand from being carried down into the channel by the surface water. For the same reason the upper surface of the stones should be further below the surface in light than in heavy clay soils.

There are many owners of land who assent to all the advantages which we have stated as arising from draining swamp and wet grounds, but urge the want of funds as the excuse for inactivity. This want may be remedied. Sell as many acres of your dry land as you have of wet, and apply the money to draining your wet grounds, for which it would be amply sufficient; and you will find that you have exchanged land of moderate fertility for that which will produce crops in the utmost luxuriance. As this is the dryest season of the year, it will be the best time for the operation.

Lime as a Manure.

We continue our extracts and notices of the "Essay on the use of lime as a manure, by M. Puvis."

Our author seems not to have reflected that in different soils lime occurs in very variable proportions; but speaks either of such as have none, or of such as contain it already: as if *some* was *enough*. The following advice, however, is judicious: "Liming upon a large scale, ought not to be done until after having succeeded in small experiments on many different parts of the ground to be improved."

He also advises against having the lime reduced to a state of mortar before it be applied to the land, which circumstance may occur during heavy rains through inattention; and he remarks that "it should be avoided more than every other injury to the manure." He might, however, have explained the reason of such injury. This consists in its becoming clotted, or indurated in lumps, which are not to be pulverized without much labor; and of course, will not be so intimately mixed with the soil. The central parts of such lumps, must act very inefficiently on putrescent manures, as well as on the acids which the soil may contain.

He informs us that the Greek and Roman writers make no mention of the use of lime on *cultivated lands*, nor on *meadows*, though Pliny names two provinces of Gaul whose fields lime rendered more fruitful; and Puvis remarks that the agriculture of the barbarians was in this particular more advanced than that of the Romans. He admits that in England, liming was in use *earlier* and *more generally* than in France; and speaks of good agricultural practices remaining in particular countries where they were established, without being spread abroad. The following sentence however indicates the march of of intelligence: "New novelties carry no alarm with them; and within the *last twenty years*, liming has made more progress than in the *two preceding centuries*."

We copy his account of different modes of applying lime to the soil:

"Three principal modes are in use for applying lime. The first is the most simple, and is the most general wherever lime is obtained cheaply, and where culture is but little advanced in perfection, and manual labor is dear. This consists in putting the burned limestone immediately on the ground in little heaps at 20 feet average distance, and each containing from a cubic foot of the stone to half that quantity. When the lime has been slacked by exposure to the air, and has fallen into powder, it is spread on the surface so as to be equally divided.

"The second mode differs from the first in this respect: the heaps of stone are covered with a coat of earth, about six inches thick, according to the size of the heap, and which is equal to five or six times the bulk of the lime. When the lime begins to swell by slacking, the cracks and openings in the heap are filled with earth; and when the lime is reduced to powder, each heap is worked over, so as to mix thoroughly the lime and earth. If nothing hurries the labor, this last operation is repeated at the end of fifteen days; and then after waiting two weeks more, the mixture is spread over the soil.

"The third process, which is adopted where culture is more perfect, where lime is dear, and which combines all the advantages of liming without offering any of their inconveniences, consists in making compost heaps of lime and earth, or mold. For this, there is first made a bed of earth, mold or turf, of a foot or there abouts, in thickness. The clods are chopped down, and there is spread over a layer of unslacked lime of [about 2 bushels and three quarters*] for the 20 cubic feet, or a ton to the 45 cubic feet of earth. Upon this lime there is placed another layer of earth, equal in thickness to the first, then a second layer of lime; and then the heap is finished by a third layer of earth. If the earth is moist, and the lime recently burned, 8 or 10 days will suffice to slack it completely. Then the heap is cut down and well mixed; and this operation is repeated afterwards before using the manure, which is *delayed as long as possible*, because the power of the effect on the soil is increased with the age of the compost; and especially if it has been made with earth containing much vegetable mold. This method is the one most used in Belgium and Flanders; it is becoming almost the exclusive practice in Normandy; and it is the only practice and followed with the greatest success in La Sarthe. Lime in compost is never injurious to the soil. It carries with it the surplus of alimentary manure which the surplus of product demands for its sustenance. Light soils, sandy or gravelly, are not tired by repetitions of this compost. No country, nor author, charges lime used in this state, with having been injurious to the soil. In short, this means seems to us the most sure, the most useful, and the least expensive mode of applying lime as a manure."

Notwithstanding this encomium, the practice is much inferior to the Pennsylvanian method of applying lime,—of which a notice may be found in our 5th volume at page 225, and another in our current volume at page 241. By this mode, at a far less expense of labor, all the benefits contemplated by our author, are obtained. It will scarcely be pretended that mixing earth with the lime, has any other advantages than to *carbonate* the latter, and to charge with such fertilizing matter as the earth can supply; and these can be had by moving the lime by itself without any incumbrance.

* Supplied from a note of the translator's.

Preserving Fruit.

Fruits, especially those of delicate texture and of a juicy nature, are among the most difficult substances to preserve fresh and unaltered. A litttle care however, will, in many instances, enable us to have some of the most delicious kinds throughout a large part of the year. And it is a subject worthy of attention, particularly as fruit preserved in its fresh state is exceedingly grateful in sickness at those seasons of the year when fresh fruit is not generally to be obtained, and when that preserved in sugar is not pleasant nor suitable.

It is often found sufficient for the preservation of fruits, to keep their surface dry, and seclude them from the air. This is effected in various ways. Currants, cherries, and the smaller varieties of plums may generally be kept, by gathering them when they are perfectly dry and sound, and putting them in bottles, well closed, first with cork, and then with melted rosin or wax, and keeping them in as cool a place as possible. We have eaten of grapes, preserved in a fine fresh state through the winter, by closing the cut end of the stem with wax, and then packing them in jars, with saw-dust previously well dried in an oven. The jars were afterwards closed with well fitted wooden covers, and luted with wax, and kept in a cool place.

The American translator of Chaptal's Agricultural Chemistry, adopted with great success the following method of preserving in bottles the most delicate fruit. "Pick carefully over, the fruit to be bottled, so as to take only such as is perfectly sound, and put it in bottles having wide mouths with closely fitted corks,* shake the fruit down so as to leave as little space unoccupied as possible in the bottles; when they are quite full, set them *uncorked* in a boiler of of cold water over the fire, raise the temperature of the water as quickly as possible, to the boiling point, and as soon as ebullition takes place, put the corks into the bottles, and remove them from the boiler; some ready melted cement, such as is commonly used for closing bottles, must be immediately applied over the corks, and the fruit, having been freed by the heat from the air contained within the bottles, will thus be protected from the action of the external air, and may be preserved fresh for many months."

The following extracts, describing a mode of preserving the larger kinds of fruit, is from Bradley's "Survey of the ancient Husbandry and Gardening," (published in 1725,) and contains some excellent hints on the subject. "Wood ashes I have experienced to be an excellent preserver of fruits, and much the best thing we know to pack tender fruit in for transportation; will not only keep such soft fruits, as peaches, nectarines, apricots, &c. from bruising

* The cork should be softened in hot water.

in the carriage, but keep their fleshy parts from putrefaction. The late lord Capel, who was so famous for his fine gardens at Kew Green, by this means had fruit sent him from this place to Ireland in very good perfection. The method of doing which was to gather the fruit when it was quite dry, and after laying it in flannels for some hours, a box was prepared for it with a bed of fine sifted wood ashes at the bottom about four inches thick, upon which the fruit was laid so as not to touch one another by about an inch, and then wood ashes sifted over them till all the spaces between them were filled, and the fruit was covered about two inches; then more fruit was laid in as before, and then more ashes, and so on, *stratum super stratum*, till the fruit reached within four inches of the top of the box, and then as many ashes sifted over it as could be pressed down under the lid of the box by a man's full strength; so was it carried several hundred miles without receiving the least injury. The fineness of the parts of these ashes render them in the first place capable of being pressed very closely together, that there can no air get through them, and they are not only without any putrefying quality in themselves, but seem also to contain some power which is opposite to putrefaction, and therefore we never find any insects breed among them." If desired to keep the surfaces of the fruit from being soiled by the ashes, they may be previously wrapped separately in soft paper.

Drinks in Harvest.

One of the greatest triumphs of the temperance reform, and one, the beneficial influence of which is most felt by the farmer, has been achieved in the harvest field. Where spirits have been banished, we no longer see such shocking work made by the *sows and pigs*, (as a facetious farming friend, strongly attached to the sickle, persists in calling the cradle,) among the wheat, and the greater quantity of grain saved, and the superior neatness of the work done, should induce every farmer to exclude alcoholic drinks at once from his fields. We have seen the time, when about four o'clock some of the laborers might be seen snoring under the corners of the fences, or the shadow of a wheat rick, laid by, by the spirit of rum or whiskey; and those who continued their operations went whooping and hallowing through the field, throwing the grain about at such a fearful rate, that had Israelitish damsels been gleaning after them, wheat enough in a day might have been gathered, not only to have clothed the fair gatherers in fine linen, but purchase husbands to boot.

But in ridding ourselves of one evil, we must be careful not to run into another. Because we have become temperate in the use of spirits, that is no reason why we should become intemperate in the use of water; and there is reason to apprehend, from the frequent injuries sustained by drinking too much cold water in very warm weather, or when the body is overheated, that such is the fact. Men who labor hard, and sweat freely, must have the means of sustaining perspiration, or nature soon becomes exhausted; they must drink and drink freely, and it would be well if something could always be taken which would not only assuage the thirst, but afford permanent benefit. If some little pains, or a little expense, is necessary to accomplish this, the farmer will find himself in the end well rewarded. Good beers, of which hops and molasses are the active ingredients, are easily made, and make excellent drink. Milk and water is preferred by many, and combines in a good degree the above desired qualities; water to which a small quantity of oat meal has been added is used in Scotland to some extent, and its use has been introduced into this country; but perhaps the drink most profitable to all, the most effectual in quenching thirst, and the least liable to produce injurious effects, is cold water made sufficiently sweet with molasses—maple is the best—a little ginger of good quality stirred in, and a little acid of some kind, lemon juice, or even common vinegar, added to suit the taste. This makes a pleasant and healthy drink, worthy of trial. G.

Stacking Hay.

The plan of stacking hay is one which is not to be commended in itself, and which should be avoided by every farmer as much as is possible with the other arrangements of the farm. The reasons which to us are conclusive against stacking where it can be avoided are these: The outside of the stacks, forming no inconsiderable part of the whole, by exposure to the weather becomes utterly worthless as fodder—in feeding it out, much of the hay is blown away, or trodden down by the stock, and is thus lost, that would be saved were it fed from the rack or in the yard—the manure is not at the command of the farmer, and of course cannot be applied to those parts of the farm that most require it, and to those crops that would be the most benefited; and when the stacks are made in the meadow, as they most generally are, the turf all around them is poached up by the feet of the cattle, and the surface rendered uneven and unfit for mowing. Besides, hay fed out at the stack will not go near as far as when fed in stables or warm yards, nor will the stock receive the same benefit.

Still, stacking hay to a considerable extent *must* be practiced for the want of barn room, and where it is thus necessary, the best means of doing it should be adopted. If it is intended that the hay shall be sold, the larger the stack constructed the better, as the surface exposed is always less in proportion to the size. If it is intended to be fed out where stacked, smaller stacks will be preferable, as the loss from injury by the weather will be more than compensated by the greater distribution of the manure, and the less permanent poaching of the ground. The better way of making these ordinary sized stacks, is to lay up a square pen of sound rails to the height of six feet; on the bottom tier of rails let others be laid across at little distances to serve as a flooring for the stack; let the top rails be well secured at the corners by notching or otherwise; a pole of suitable height, if desired, planted firmly in the center, and the pen is fit for use. If the stack is well laid up, it will project over the rails all around, to the distance of two or three feet, thus entirely screening the lower and more solid part of the stack from the influence of the weather, and is at the same time completely fenced against cattle and sheep. Such a stack may easily be made to secure three tons of hay, which is as much as can be beneficially fed out at one place, to an ordinary stock. After a stack is laid up to the requisite height, and topped off, great care should be used in thoroughly smoothing and raking the surface downwards, so as to prevent the action of rain and weather in the best manner. We have seen stacks so constructed, that the rain was thrown off with almost as much certainty as from a shingle roof, and others the outside of which was so arranged as to invite the moisture to enter instead of warding it off. In stacking hay, English farmers generally show more skill than American ones. This skill and care, derived from custom and experience, it would be well for us to imitate. G.

Steam Plough.

The late English journals record an interesting experiment on steam ploughing which was attended with the most complete success. Six acres were turned over in a short time, and in the best manner; "sods eighteen inches in breadth, and nine inches in depth, being cut from the furrow, and completely reversed in position, the upper surface of the sod being placed exactly where the under surface had been." This plough has been invented by Mr. Heathcote of Tiverton, and is a powerful though too complex a machine for general adoption. It is evident such a plough must require a large field to work properly, and Mr. H. is of the opinion, that it would be most useful where 1500 or 2000 acres in one piece were to be operated upon. We think such a plough would be the very thing in the great prairies of the West, where now from four to six yoke of strong cattle are required for the first breaking up of the deep turf and the strong roots of the wild grass. That it will be much simplified, and made more generally useful than the present machine, from description, can be, we do not doubt; yet among common farmers the horse team will probably be found most beneficial. C.

Silk worms are feeding now and some of them winding their cocoons. The ordinary method is to lay branches over the worms or set broom brush upright and they will find a position to their own taste. After they have finished winding, those cocoons to be used for reeling must be boiled in hot woter a few hours or laid in the sun three or four days, as the moth will come out in about ten days, if not destroyed and spoil the cocoon. Those cocoons which are intended for seed, should be of the largest size and bright color and firm to the touch. They should be laid away carefully, and in ten or fifteen days, according to the weather, the moths will come out. The male is known by his small size and the continual fluttering of his wings. The female is larger and seldom moves. They should be taken in pairs and put upon sheets of papers and in about twenty-four hours, the female lays three or four hundred eggs. They should be laid away carefully, rolled up, as they adhere to the paper. The moth die soon after the eggs are laid.—*Northampton Cour.*

Tansy.—This herb may be frequently observed growing in the country church yards, which induces us to think it was formerly used as a funeral plant. Tansy has this peculiar virtue, that if any dead animal substance be rubbed with it, the flesh fly will not attack it. Boorhave says the leaves applied to a dead body, and intruded into the mouth and nostrils, preserve it from putrefaction and insects; whence the plant has been called *Athanasia*, that is, immortal plant.

COMMUNICATIONS.

Agricultural Prospects in Onondaga.

BY W. G.

Wheat appears better now than it did in May. The season has been of the most favorable kind, and where a root of this plant escaped destruction in the winter, it has spread and grown finely. The ears are in general large, and should they fill as well as present appearances indicate, there will be more wheat than was anticipated by many early in the season; still there cannot in the whole county be more than two-thirds of a crop, and some suppose not more than half the usual one.

To supply the probable deficiency in the winter wheat crop, far more spring wheat was sown this year than has usually been the case. Some twenty years since it was extensively cultivated among us, but the improved methods and greater success in the culture of winter wheat, added to the greater liability, as was then imagined, of the spring wheat to the attacks of the Hessian fly, caused it to be nearly forgotten. Last year, however, some farmers again sowed small quantities of this grain, and it succeeded well, yielding from eighteen to twenty-five bushels per acre, and this year a large quantity has been put in the ground. It now looks well, and will probably yield well. Some of the most prominent differences between winter and spring wheat are these:—Spring wheat does not yield as much flour as winter wheat, the difference being nearly two pounds to the bushel—it does not make as white flour as good winter wheat, the flour having a slight yellowish tinge; and bread made from it has a taste resembling that made from wheat grown in the least possible degree. For this slightly sweetish taste it is preferred for bread to the winter wheat by some farmers, and it is evidently one of most nutritive of our cultivated grains.

Barley will be good. Some fields are now ready for cutting, and the berry exhibits a plump and fine appearance. The cultivation of barley is increasing, and one or two towns in the county sell from sixty to one hundred thousand dollars worth each. The six rowed, which has been most generally cultivated, is gradually giving way to the two rowed, the latter it is supposed requiring rather less seed, does not smut, tillers more, and is equally, if not more, productive.

The season has been pretty good for oats since the heavy spring rains ceased, and indications of a good crop are fair. Some pieces are heavy. While oats will command from forty to fifty cents per bushel, farmers with ordinary yields make money in raising them, as they are on the whole less liable to failure than any other crop, and require less care in the culture and the gathering than any other.

Corn, owing to wetness of the early part of the season, and the consequent low temperature, is rather backward, but makes a very good show, and should the fall frost not prematurely occur, will give a handsome yield. Our farmers do not pay attention enough to procuring early varieties of seed; experience should long before this have taught them, that a fortnight's difference in the ripening of a field of corn, is all important to them; and there is at least this difference in time between the varieties cultivated.

Peas are fine. For a few years the culture of the pea was nearly discontinued in this county, as it was so infested with the bug as to be nearly worthless. The discovery by Mr. Eaton, that sowing peas two or three years old would free them from the bug, and that late sowing, so that the fly should be in advance of the young pea, has much the same effect, has again introduced it to a considerable extent. The pea as a preparative for wheat is excellent, and as a substitute for corn in fattening pork is without a rival. It is now to a considerable extent sown with oats at the rate of one bushel of peas and two bushels of oats per acre, for horse feed, and makes, as experience has shown, one of the best that can be used.

Grass is unusually heavy, and a large part of it has already been secured in prime order. Farmers would do well to recollect, that the summer is the time to lay in an abundant supply of food for their flocks and their herds, and if their meadows are not sufficiently ample for this purpose, every thing that is valuable for stock feed should be carefully preserved. If after the six or seven months' foddering of next winter any thing should remain, there is no necessity of its being lost. A calling to remembrance the half starved skeleton-like looking animals of the last season of snow, and the prodigious suffering and loss the brute creation suffered in consequence of the negligence of their owners, might be of essential service to many.

Of the roots no correct opinion can at present be formed. Potatoes appear well, and we think more than usual were planted. Mangel wurtzel has not come into general use, owing perhaps in part to the difficulty of making the seeds grow. The culture of the ruta baga is spreading rapidly, and patches of a quarter or half an acre are quite common. The excellence of this root for feeding cattle and sheep, the ease and certainty with which it may be preserved, render it one of the most valuable acquisitions to our farming community. All that can be said of it now is, that it promises well. W. G.

Otisco, July 25, 1836.

Keeping Lambs.

BY A.

A correspondent, in a late number of the Farmer, in giving an account of a disease which attacked the lambs dropped in the spring of the year, (a swelling under the throat which proved very fatal,) seems induced to attribute it to the mode of feeding the ewes through the winter, which was for a while, by giving them good hay and a sheaf of oats cut green and well cured, and after the oats were expended, a sheaf of grown wheat was substituted for them. What effect the grown wheat might have had on the ewes and their offspring I cannot say, but I am confident no such effect should be attributed to the oats. Some of the best flocks of sheep I have ever been acquainted with, were fed with good hay and a daily sheaf or two of oats, and with the best success, no injury in any case resulting from their use. Where fresh food is not at hand, such as turneps or beets, oats will be found the best substitute, especially if they are cut while green and thoroughly cured. A friend of ours last fall sold off his whole flock of sheep, with the exception of thirty lambs, which he kept as the basis of another flock. They were kept through the winter on good hay and a bundle of oats a day, and notwithstanding the severity of the season, kept in good order, or rather were fat. This spring they averaged a trifle over three pounds of wool a head, though of a high merino grade. I have never seen or heard of lambs being diseased in the manner spoken of by your correspondent; and as others in his vicinity would seem not to have been troubled in the same way, the probability is that it was owing to some local cause which may never again be operative, though it is barely possible the grown wheat fed in the sheaf may have been an agent in the business. Should it again occur, observations will enable him to detect the cause, and of course indicate an appropriate preventive or remedy. A.

Breaking Vicious Cows.

BY A YOUNG FARMER.

I observe on the 236th page of the current volume of the Farmer, a communication signed "C. P." in which the writer doubts of the practicability of the method of breaking cows described in the 27th number. Now, although I am not an old man, I am nevertheless an *old milker*, and have been occupied in the management of cows of all sorts from childhood. Some have been very gentle and well broken, while others, and not a few, were insufferably outrageous kickers. But no cow under my management ever continued bad long—I have always speedily overcome them, by a method very similar to that described in the 27th number of this paper. There was one old cow that had been perhaps well broken; but she was completely spoiled by bad treatment from two little boys who had the milking of her to do; a short time after she came under my care, she was one of the best behaved cows I ever saw. I am not surprised that C. P. has considered milking one of the most unpleasant chores to be performed, when he cannot cure kickers. Now, I always considered it as one of the most pleasant, and I have never found a kicker which I could not very speedily cure; so that I could set my pail directly under her so as to be as convenient as possible for milking, without the least danger of having it upset.

I acknowledge that "a vicious cow ought never to be raised;" they are nevertheless very frequently raised, and we must take them, often, as we find them. If a cow is an excellent milker, but withal a great "shin batterer," I should prefer curing her by twenty minutes labor, to "disposing of her for beef."

There is another bad habit which some cows have, that I have found more difficult to cure them of, than kicking; and that is *running about*. I know of one cow that was milked in a large field by a boy who did not understand his business. The cow was good enough in the first place, but she was once frightened and ran off; the milker chased her round the field till he cornered her, and *then* commenced whipping her. From that time commenced her career of racing. If the boy had had a long run after

her, so much the more severe was the whipping he gave her in the corner where he was to milk her. The consequence was, that she always took care to keep in the broad field, and never by any means to approach the dreaded spot where she was to receive the thunderbolt of vengeance. The effect could not possibly be otherwise. Not three weeks ago I cured a high strung, spirited young cow of running about, in a *single lesson*, although I had a very large yard to operate in. How? I drove her into a corner, and began to milk her, and every time she left it, I gave her *no rest*, until she was approaching it again, when I treated her kindly. She soon learned what I *meant*, and in a day or two her very nature seemed changed.

A Young Farmer.

From the Cultivator for August.

Beet Sugar.

We have received, from E. C Delevan, Esq., a specimen of sugar manufactured in France from the beet root, which may be examined at the office of the Cultivator. It is superior in quality to the best American refined sugar that we have seen. Dr. Spooner, of Coxsackie, has promised us another sample, which he recently procured at the manufactory in France, and for a franc, about 18 cents, the pound. We gave in our last volume, the course of culture, and process of manufacture, from Chaptal. But the manufacturing process has been simplified and cheapened, since Chaptal wrote, and the manufacture has been brought down, like the silk business, to the adaptation of household labor and family economy. We are not yet in possession of the new process; but as soon as we obtain it we intend to give it circulation in the Cultivator. The business is not likely to interfere with the business of the south. The amount of foreign sugar imported is very great; and the consumption is likely to increase with the domestic supply. The advantages which the fabrication of sugar from the beet promises to the far west, must be particularly great.

The culture of the beet, and the fabrication from it of sugar, as a branch of national industry, and a source of national wealth, is not only exciting great interest in France, but in Prussia and in other states on the continent. Gen. Tallmadge has transmitted to the American Institute many facts in confirmation of these truths; and the letters of Mr. Pedder, who went to France to obtain a practical knowledge of the business, abound with valuable notices of its improvement and extent. The Royal Central Society of Agriculture in Franee, awarded in April a premium to M. Lecerf, for having established a small manufacture of beet sugar, where he prepared daily, without other aid than that of his family, 50 kilogrammes (137½ pounds) of sugar, ready for immediate family use. The society have offered premiums to the value of 7,200 francs, ($1,296,) besides medals, as a further inducement to enterprise and improvement in the business. The cultivation of the beet, says Mr. Pedder, embraces three grand distinct objects: 1st. the making of sugar; 2d. the feeding of cattle; 3d. the improvement of agriculture: for it affords an excellent material, and a substitute of turneps and carrots, for stock, and a suitable root crop to alternate with grain and grass. It causes a cleansing and perfect pulverization of the soil, and wheat is found to succed admirably well. It is considered the foundation of all good husbandry, as the turnep is in Norfolk.

Mr. Pedder had visited many of the beet and sugar establishments, some of which were on an immense scale, producing two or three millions pounds annually, and had joined in the manual labor of raising the beet. From the washing of the roots to the pouring of the juice into chrystalizing pans is only the work of 10 hours. 100 lbs. of beet yield 85 lbs. of juice. Some machines crush 50,000 to 75,000 lbs. of root in 24 hours. The pressed cake sells at about 10 cents the bushel, for feeding cattle. Mr. P. saw in one place 57 horses and 30 fatting oxen, fed wholly upon the cake and cut straw, the oxen being finished off with oil cake. It is now estimated, that under the improved process the beet yields 10 per cent, of saccharine matter. One gentleman had a crop of 400 acres of beets. A perfect drill barrow has been invented, which sows five rows at a time, covers the seed and rolls the ground. Fifty pounds of the cake, mixed with one pound of oil cake, are given daliy to ten sheep. 100 pounds of beets, valued at 25 cents, gives six pounds of sugar, 4 pounds of molasses, and 25 pounds of cake. There are 64 manufactories at Valenciennes and its neighborhood; and between this town and Arras, and to Belgium, the country, says Mr. P. is covered with beet fields and sugar houses; and he counted six or eight of these large buildings together, and twenty eight were counted at one time in sight.

Mr. Pedder closes one of his letters as follows: "I believe that two persons cannot meet without the first topic being *Betterave*, (beet root.) Indeed I am not sure that the parson did not preach about it last Sunduy. Nothing else is thought or spoken of; and no wonder, for from 100 pounds of beet root they make six pounds of sugnr, besides eight popnds of molasses, with which to make sugar of the second quality, and fifteen pounds of cake, sufficient to keep three sheep a day.

"Three years ago there were 13 manufactories at Valenciennes, there are now 64. Land which was then 500 francs an arpent, now bring 1,200; the price of labor is much risen, and the people are getting fat on the mutton and beef made upon the cake, or *caput mortuum* of the root. What will this not do for America."

—

Agriculture, for the purpose of comparison, may be considered as a *trade*, an *art*, and a *science*.

The *trade*, is mechanical, requiring muscular strength. It is imitable—it is to do a thing as one has been taught to do it, or has done it before. The ox in a measure acquires it. He knows his master and his master's crib; he treads the accustomed furrow, turns at the head lands, and understands and obeys the driver's commands. The mere servile laborer moves in the old routine, without concerning himself about the why and the wherefore, almost unconscious that he has a mind.

The *art* implies a co-operation of the mind with physical power. The mind contrives; it is a lever which greatly assists and abridges the labor of the hands. The mind, like the soil, makes return in proportion to the culture which is bestowed upon it. Both are unproductive without culture. The mind is improved by observation and reading, which makes it familiar with the best models of practice, and enables it to profit by the improvement of others, in the various departments of husbandry.

The *science* teaches the laws and properties of inorganic matter—as of rocks, earths, manures, &c. &c. of organic matter, as animals and vegetables;—of their structure, food and uses—and of the agency of heat, water, air, light, and electricity in their development and maturity—the employment and adaptation of all these matters for the best use of man. It concentrates the experience of ages, and the labors of nations, upon these interesting subjects, and makes them subservient to our wants and our comforts.—The science is a collection of facts and leading truths, illustrated in practice, and confirmed by experience.

The trade, therefore, may be managed by the hands, the art requires the co-operation of the mind; while the science superadds to both, a knowledge of the laws and properties of matter, upon which the mind and body are required to exert their energies. The first may be likened to the feeble boy, the second to the muscular young man, and the third to him whose mind and body are in the active development of thei best powers.

—

Worth rememebering.—We have been informed, by a gentleman who has had practical proof of its success, of a new mode of keeping fruits fresh for the table, as grapes, plums, &c. a long time after they have been gathered. It is simple to alternate them in layers with cotton batting, in clean stone jars, and to place them in a chamber secure from frost. The discovery was accidental. A servant in the family of William Morey, of Union Village, Washington county, about to visit her friends, secured a quantity of plums in this way, to preserve them until her return. They were found to have kept in excellent condition, long after this fruit had disappeared in the garden. From the hint thus afforded, Mr. Morey, Mr. Holmes, and one or two neighbors, laid down grapes in this manner last fall, and they enjoyed the luxury of fresh, fine fruit through the winter, until the early part of March.

—

The Pear tree.—The disease, termed blight, which six or eight years ago, as also in 1802 to 1808, destroyed many of our pear trees, is again, we learn, making its appearance. We have been of opinion that the evil arises from a minute insect, which preys upon the inner bark. An insect of this kind, almost imperceptible to the naked eye, has been known to destroy forests of the larch in Germany. Our opinion has been much strengthened by a conversation with Aaron Thorp, Esq., who finding his trees affected, has made trial of various applications, without success, until he has found he thinks, an effectual preventive, or cure, in spirits of turpentine. He applies it on and about the diseased part, in its unadulterated state, with a common brush.

—

The Hop Culture is said to be profitably conducted in England, particularly in Kent; and this will be matter of surprise, when we compare the produce with the expenses. The produce varies from one to twenty hundred pounds an acre, and the writer of British Husbandry assumes, as a fair average product, 700 pounds, while he estimates the expense of growing and securing an acre at £35 10s. (=to $157,62.) Among the items of expense we find the following:

500 poles, to repair annual losses, at 30s.	£7 10 0
Carriage of do.	1 10 0
Rent, including parochial rates,	6 00 0
Tithes,	1 10 0
Excise duty, 18s. 8d. per cwt.	6 10 8
	£23 00 8

The poles, with us, might cost half the above estimate, and the rent here would be high at $10 the acre. Deducting the difference in these items the result would be, that thirty three dollars of the above expense would be saved to the American hop grower, per acre, in the expenses above detailed; and that estimating the labor in both countries the same, the expense per acre would be about $70. Calculating the average crop at 700 pounds and the price 20 cents, the value of the crop would be $210, and the profiit $140 per acre. These data will serve to show to our readers the profits of well managed hop culture.

—

Parsneps—as a field crop.—The labor and mode of cultivating the parsnep are about the same as those of the carrot. The parsnep produces the larger crop, its avarage product being rated at 24 tons the acre, and that of carrots at 12 tons. The parsnep also contains a far greater proportion of saccharine matter than does the carrot, is grateful to the palate of farm stock, and is greatly conducive to their fattening. It possesses another advantage over the carrot, in its hardiness—it may be left in the ground till spring and not injured by frost. In the island of Jersey it forms a regular part of the field system. The roots are fed in a raw state to hogs and horned cattle; the flesh of the former they are said to render delicately white, and the benefit derived from the latter is in the opinion of many grow-

crs, neaaly equal to that obtained from oil cake, in point of the weight of flesh, and so superior in flavor, that in the island it always commands the highest price. Cows fed upon them during the winter months are stated to produce butter of a flavor and color equal to that of the most luxuriant grasses. In Jersey 25 pounds are given daily to the cows, with hay, and the cream is more abundant than from an equal quantity of milk and cows differently fed—seven quarts producing as much as 17 ounces of butter.

If the preceding facts, which we have mostly abstracted from *British Husbandry, Vol. II*, are correctly stated, and they appear reasonable, the culture of the parsnep, as a field crop, possesses great advantages over the carrot, if not over the mangel wurtzel. It should not be concealed, however, that they soon cloy with neat cattle, if fed alone: and are not deemed so good for horses as carrots—the parsnep rendering them dull, and even affecting their sight; while the carrot is found to be more beneficial than grain, and is used in Suffolk instead of grain, at the rate of from four to seven bushels each horse per week. If any of our readers have tried the culture of the parsnep as a field crop, we should be much obliged to them for a statement of the results.

—

Currant Jelly.— In reply to our correspondent *Delia*, who dates at Brookeville, Va., we give the following directions for making this jelly. Place the currants in a stone pot, without water, put the pot into a kettle of water, and simmer or boil the water till the currants settle into a mass. This is merely to express the juice readily, which being done, strain it through a woolen cloth, and put it into a clean kettle,and add one pound of sugar to every pint of juice. Let it heat moderately, until the scum has risen and is taken off; and when somewhat cooled, turn into tumbles, cover them with white paper, punctured with a pin, and set the glasses under cover where the sun may shine upon them. Jelly thus made *will not* ferment.

Russian mode of makimg butter.—Sir,–Observing in a monthly scientific journal, an article on the subject of making butter in the winter, I beg leave to furnish the particulars on that subject,as practiced in Russia since the year 1816, and which may, perhaps, be of some service to those who may be induced to make the experiment either in summer or winter. Being in that country in the year 1834, I was informed by a Russian nobleman, that the proprietor of an extentensive estate (also a nobleman of high rank)had discovered a new mode of making butter, and had received letters patent from the Emperor as a reward for the discovery, and which he stated at the time as being in full and successful operation. The process consisted in boiling (or rather a species of boiling, called simmering) the milk for the space of fifteen minutes in its sweet state; observing at the same time not to use a sufficient heat to burn the milk: it is then churned in the usual manner. He also stated that no difficulty ever occurred in procuring butter immediately, and of a quality superior far to that made from milk which had undergone vinous fermentation; and that in addition to its superior flavor, it would preserve its qualities much longer than that made in the ordinary mode; that the additional advantages were, that the milk being left sweet is almost possessed of the same value for ordinary purposes, and by some was considered more healthy, as they supposed the boiling or scalding to destroy the animalculæ or what ever it may have contained.

If the above process should upon experiment prove of sufficient importance, as to bring it into general use, particularly in the winter, it would perhaps be to the advantage of those who may practice it, to have their milk scalded in vessels calculated to stand in the kettle or boiler, by which mode the danger of burning the milk would be avoided, for it is ascertained that milk only burns on the edges of its surface, or where it comes in contact with the sides of the vessel in which it is heated, which can never happen in double kettles, or where one is placed within the other.—*London Mirror.*

Agricultural Jurisprudence.

At the late term of the Supreme Court of Errors, in this city, a question of agricultural jurisprudence was settled, which has often been the occasion of much controversy, and sometimes of a total interruption of that social intercourse and interchange of kind feelings and offices, without which neighborhood ceases to be a blessing, and actually becomes a curse. The question arose in an action of trespass for taking a portion of the fruit from a pear tree. The facts in the case were these. The trunk of the tree stood about four feet from the divisional line between the plaintiff and the defendant, and its roots and branches extended some distance into and over the defendant's land. The defendant plucked the fruit from the branches overhanging his land, to within about one foot of the line, for which the action was brought.

The defendant claimed, First, that he was tenant in common with the plaintiff, in the tree, and consequently had a right to take from the branches on his side of the line. Second, that if he was not tenant in common with the plaintiff, he was owner in severality in that part of the tree which drew its nourishment from his soil, and that he had a right to take the fruit from the branches that overhung his land. Third, that if he was not owner of that part of the tree which is sustained by and overhangs his land, still he was entitled to the fruit growing on such branches. Fourth, that he had a legal right to remove the overhanging branches and projecting roots, they being a nuisance which he had a right to abate.

The court ruled the first three points against the defendant, and decided that the ownership of the tree was in the proprietor on whose land it was originally planted, and that he, of course, was entitled to all the fruit, though the roots and branches may have extended into and over the land of the adjoining proprietor. On the last point the court decided that the projecting roots and branches were nuisances which the defendant might have abated; but had no right to appropriate to his own use.—*Silk Culturist.*

From the New England Farmer.

Raising Chickens.

The following is a valuable article, and relates to a branch or rural economy, which deserves more attention than it has received in this country. Further favors of a similar nature from the same hand are respectfully solicited.

Mr. Fessenden—In one of your late papers I saw mentioned a successful way of *raising chickens*,—I have been in the habit of raising them for some years, and if you think favorably of the mode I have adopted, you can insert it in your valuable paper.

I keep my hens warm under cover during the winter, and feed them on "Brewers' Grains" placed in an open box or tub, that they may eat when they please, occasionally giving them oats, corn, and oyster shells pounded fine, and plenty of water—by keeping them warm and well fed they begin laying earlier in the season. I prefer spring chickens, as they lay earlier than old hens —and the old hens to set, as they make the best mothers. I take care the eggs do not get chilled with cold, and keep them in a warm place in my house. When three or four hens want to set, I put from thirteen to fifteen eggs under each of them, according to size—the day of the month marked on each egg—and after the hen has set a week or ten days I examine them by holding the eggs to a crack or knot hole in a board when the sun shines through, and if I discover any rotten ones, I take them away and replace them with fresh ones, marked as before mentioned. When the chickens are all hatched I put two or three of the broods to one hen, in a coop with an opening against an empty barrel placed on the bilge, and with a little care, when put in the coop, the hen may be made to brood them at the further end of the barrel. In that way the chickens that are not covered by the hen huddle together around her, and keep each other warm. The hens from which the chickens are taken I put into another coop, and in about a fortnight they begin to lay again. The hen being confined in the coop, will leave her chickens much earlier than if left to run at large with them, and the chickens will become so accustomed to going into the barrel and huddling together, as to be quite contented to give up the hen's brooding them. After the chickens are two or three weeks old I remove them with the coops into my garden, where they feed upon insects, so as to require but little food—but do not keep them there until they are are large enough to injure the garden.

I feel persuaded that in the way I have proceeded, our market could be supplied with an abundance of poultry, and I recommend it with confidence, if managed with care and attention, as profitable to those who may engage in such business.

Charlestown, July, 18 6.

From the Bucks County Intelligencer.

Peach Tree.

I am afraid our farmers are, with too much justice, chargeable with neglect, in not endeavoring to discover the habits of depredatory insects, which destroy our fruit, as well as other vegetables; or, if any discovery made, owing to diffidence of appearing before the public with a simple narrative of facts, the advantage is lost to those who might profit thereby. I shall endeavor to break over this difficulty, and relate such facts as have come to my knowledge respecting the insect which destroys the peach tree.

Having, with the community in general, for many years, suffered in the destruction of my peach trees, and hearing of a method which was thought had proved a preservative, I, about the year 1806 or 1807, (from my present remembrance,) planted out about seventy young peach trees in a nursery in my garden, and cultivated them there for two years, and prepared to set them out, but before I commenced digging them up, I concluded to trim them, when I discovered on the under side of the small limbs, that the bark in very many of them appeared to have been perforated by an insect the preceding summer, and the tree growing very fast, the bark had grown over the wound. To ascertain the cause, with my penknife I carefully pared away the bark, and I then discovered, in every instance, a black speck in the wood of the young branch, which must have been done by some insect. I then began to dig up the trees, when I discovered numerous small worms, nearly three-eighths of an inch in length—white of color—so many,that I thought it probable they might in number correspond with the wounds in the limbs of the tree, from the small size of which I concluded that there had not been more than one egg deposited in each place, and by a fly; matured by the sap of the tree, and. like the Locust, dropped to the ground to find a more congenial situation. On digging up the tree, I found that numbers of these small worms had made their way through the surface of the ground, to the roots of the trees, and formed a lodgment there, and by their operations, near the surface of the ground, had fretted the tender bark, and the gum oozing out, had formed a favorite medium for the perfect accommodation. I washed the roots of the young trees well, removed all the worms, and set them out where I wished them to stand, tying each tree up with rye straw well squared at the but end, as much as could be conveniently grasped by both hands, and bound up with three bands—the ground round the tree not being entirely filled up before the straw was placed, and then raised up six inches round the straw.

Having, as I apprehended, made some discovery which might be of use in future, I concluded to trace the subject further, and with this view I dug up a peach tree on the decline, with the worm at the root; I sawed off a part of the body of the same, and put it in a secure place, with a quantity of earth, covered the pot with a paper

securely, with pin holes therein to admit air, being very desirous of identifying the insect, if he made his appearance; this was in the spring. I often visited my nursery without making any discovery; the worm had not yet changed its form—when one morning, I think in June, my hired man, being privy to my attempts to discover the insect, on examining the trees, found a fly with its sting or lance so firm in the tree that he caught him by the wings before he could extricate himself, and brought it to me, highly pleased with the achievement; I then opened my nursery, and found the flies had indeed come out, one or two of them, but for want of liberty to fly or other cause, they were both dead; yet the form was preserved, and they exactly corresponded, on comparison, with the one caught by my tenant; the form about the thickness of the common house fly, and the color the same, but rather more than twice their length. I then went to a row of my peach trees, and found flies quite similar in size and color, flying about them in great numbers, and occasionally lighting upon them. I then visited plum, apple, and cherry trees, but could discover no such insects on or about them.

I continued to tie up those trees for nine or ten years, without losing but one from the insect—which by some means was uncovered of straw, I think two successive years; when the bark near the roots, as well as other parts, had become so thick and rigid that I thought it no longer necessary; I then only heaped fresh tan around the body of the tree, about four or five shovels full, and they remained in full vigor over thirteen and not exceeding seventeen years—not exactly recollected—when, on one of these remarkable dry seasons, they all bearing full of peaches, there was not enough moisture in the ground to support the trees under such a burthen of fruit, they declined ever after, and not a tree showed any vigor, but soon died from the shock they had thus received.

From the foregoing premises, I have come to the following conclusions, viz: That the fly lays its eggs on the under side of the limbs of the young peach tree, when the bark is young and tender, and that after the tree is from seven to ten years of age, the fly can do them little injury. The egg becomes a worm and drops out before the second flow of sap, in the eighth month, (August,) as the wound closes up during the latter growth; and as nature is liberal in all her operations, there are many more worms formed than ever reach the root of the tree; and that tying up the body of the tree with straw carefully, as directed, they will not be injured by the worm, although in a few instances I have found on removing the straw on the approach of winter, that the worm in falling had made its way to where the first band, by keeping the straw there moist, had affected a lodgment, but they were easily taken out with the point of a knife, without injury to the tree; yet the said tree is the subject of other influences, perhaps atmosphere, called by that discerning agriculturist, Judge Peters, now, or late, of the Supreme Court of this state, the "yellows," which is a disease of frequent recurrence, of which many die, without any agency of the worm.

There can be no mistake in the facts stated if there is in the conclusion drawn; but I have so much confidence in them, that I am willing to add my name to what I have written.

SAMUEL JOHNSON.

Buckingham, Bucks co., Pa.
22d of 2d mo. 1836.

P. S. I have now upwards of thirty young trees under the same kind of care.

Eleven hundred dogs have been killed and buried in this city within the last ten days. The City Inspector paid for that number, and the probability is that many more were killed, of which no account has been given. The sum allowed is fifty cents each, so that $550 have been paid in the time mentioned.—*N. Y. Times.*

Culture of Hemp.

The following calculation of the average cost of a ton of hemp, the quantity of land required on which to grow the same, together with an estimate of the nett proceeds per acre, is from a report made to the Legislature of Ohio:

Five acres of land, at $2 per acre,	$10 00
Ten days work, with a team, ploughing, &c.	10 00
7½ bushels of seed, at $1 per bushel,	7 50
15 days' cutting, at fifty cents per day,	7 50
7½ days' taking up,	3 75
2 days hauling to rot, &c. with two hands,	3 00
15 days putting in and taking out of the water, spreading, &c.	7 50
5 days taking up,	2 50
30 days breaking and scutching,	15 00
Boarding hands, say	15 00
Total amount of expense per ton,	$81 75
Add to this, as an average cost of transportation to New York or Baltimore,	25 00
Making the actual cost of a ton of hemp, delivered as above,	$106 75
Suppose the average value of a ton of good water rotted hemp,	200 00
From which take the cost of growing, carriage, freight, &c.	106 75
Leaving the nett proceeds of five acres of hemp, at	$93 25

Being something less than 19 dollars per acre. Dew rotted hemp is not worth, on an average, to exceed three-fourths as much as water rotted.

Green's Patent Straw Cutter.

A new Invention, on a new Principle.

THE subscribers having obtained the exclusive right of making and vending the above machine for a large district of country, take the liberty of informing the public, that they have associated themselves under the firm of JAMES D. SHULER & Co. and have erected in the village of Lockport, Niagara Co. an extensive machine-shop, for the construction of this useful and deservedly popular machine, where it may be had at any time, warranted of good materials and construction, and so confident are they that it will suit purchasers that if they are not satisfied on trial, they may return the machine and the money will be refunded. As this machine when examined will recommend itself, the ordinary course of presenting certificates (although hundreds might be obtained) will not be resorted to, yet the subscribers conceive it their duty to give the public the following description and notice taken of it by public constituted societies. Price at shop $30. All expenses of transportation, &c. additional.

J. S. SHULER.
J. D. SHULER.

Extract from the Report of the Committee of the Brighton (Mass.) Fair, on Experiments, Discoveries and Inventions.

The Committee on Experiments, Discoveries and Inventions, respectfully report: That in the exhibition of Machines and Implements immediately useful to the farmer, there were several which deserve the patronage of the society, among which are the Straw Cutting Machine, invented by Benj. Greene and introduced to use in this state by J. R. Newall. In this Machine, the cutting is performed by a number of knife edges, which are fixed upon a cylinder.—These are, in rotation, brought in contact with a leaden cylinder, which acts as a block upon which the straw is cut. As the straw is drawn in between the cutting edges and the leaden cylinder, no separate feeding rollers are required. The machine is compact in its form and operates with great rapidity, by the application of a small force. The committee were led by the very strong evidence in its favor, from persons who had used it for many months, to award to its introducer the premium of $10.

WM. PRESCOTT,
DANIEL TREADWELL, } *Committee.*
RICHARD SULLIVAN,

Brighton, Oct. 14. 1835.

From the Cultivator.

GREEN'S STRAW CUTTER.—This is the most simple and efficient machine of the kind that has yet been offered to the public. It is made very strong, and not liable to become injured, nor to get out of order. The apparatus consists principally of two cylinders; the upper one is of iron, having the requisite number of knives set in groves. All that is necessary in operating is to put in the straw, and turn the crank. After the straw is once cut, it can be put in again, and cut with increased rapidity the second time.—More than double the quantity can be cut in the same space of time by this than by any other machine used in this section of the country.

I set a man at the crank, and with the hay close to the machine commenced feeding. With my utmost exertion I could not keep it regularly supplied. In five minutes, we cut *eleven bushels*, heaping measure, of hay. Had it been fed according to its power of execution, one fourth more would have been cut.—Had I used straw instead of hay the quantity cut in the above time, would have been as great, as it is more easy to supply the machine without interruption. It cuts corn stalks with rapidity, particularly small ones. The box is made large, and by putting in a good deal of hay at once, or by having it close to the machine, one person can feed it and turn the crank at the same time.

Extract from the report of the Committee of the Albany Fair on Farm Impliments, &c.

GREEN'S STRAW CUTTER, presented by C. N. Bennett, was the only implement of the kind exhibited. It is a hand crank power. It is 5 feet long by 2 1-2 feet wide. It has 12 knives, 8 inches, on a 4 inch cylinder, and works upon a cylinder or roller, of lead—will deliver two bushels of cut hay per minute—feeds itself and may be managed by a stout boy. Price, highly finished, $30. The committee do not hesitate to recommend this as the most complete and perfect implement of the kind which has come under their notice. They have awarded to Mr. Green, a beautiful cake basket valued at $15, for the invention of his valuable machine.

J. BUEL, *Chairman.*

REYNOLS & BATEHAM, at the Rochester Seed-store are appointed agents for the sale of the above machines where a constant supply will be kept on hand.

Rochester, July 24th 1836.

ELECTION NOTICE.—*Sheriff's Office, Monroe County, Rochester, July* 23, 1836.—A general election is to be held in the county of Monroe, on the 7th, 8th and 9th days of November next, at which will be chosen the officers mentioned in the notice from the Secretary of State, of which a copy is annexed. ELIAS POND, Sheriff.

State of New-York, Secretary's Office, Albany, July 15, 1836.

Sir—I hereby give you notice that at the next general election of this state, to be held on the 7th 8th and 9th days of November next, a Governor and Lieutenant Governor are to be elected.

I also give you notice that a Senator is to be chosen in the Eighth Senate District in the place of John Griffin, whose term of office will expire on the last day of December next.

JOHN A. DIX, Secretary of State.

To the Sheriff of the county of Monroe.

N. B.—The Inspectors of Election in the several towns in your county will give notice of the election of a Representative to Congress from the 28th Congressional District, and that 42 Electors of President and Vice President are also to be chosen at the general election aforesaid. They will also give notice of the election of Members of Assembly, and for filling any vacancies in county officer which may exist. july26

A Farm.

The editor of the Vermont Chronicle in a letter from Wilkesbarre, Pa. June 13, gives the following account of a farm which he visited near that place.

This farm extends from the bank of the river one mile, embracing in one rectangular plat, 160 acres of level bottom land. I was shown first a field (25 acres) of Indian corn. This was undergoing the first dressing with the corn harrow and awaited the second and third dressing by the implement called the cultivator—the hoe not being used at all. Sixty bushels to the acre is the ordinary yield. Adjoining this was a field of 25 acres of oats, in excellent condition and promise. I was next shown a field of about the same quantity of wheat, of the species *blue stem* and *white flint*. Thirty bushels is an average yield to the acre for wheat on this land. This crop was suffering from the Hessian fly. On examining several stems I found, near the ground and imbedded beneath the outer sheath, from one to five of the flies in the chrysalis state. The effect of this is to weaken the plant and cause it to fall down, perhaps to break off and die. After the fly is hatched it does no injury to the wheat. This fly is doing great injury to the wheat in this region. Let me suggest to the bug-catchers to devote more attention to the *whole* natural history of insects, especially pernicious ones. The man who will develope the changes and periods, and habits of the Hessian fly, the cut worm, &c. with a view to remedies for their ravages, will do the state more service than the barren exhibition of fifty cabinets of insects with pins stuck through their backs. The cut worm is also making great ravages with the corn. My agricultural friend says that in his experience, he has found deep and thorough ploughing the most effectual remedy. The worm or its eggs, lying near the surface, if the soil is turned but slightly, the insect is soon warmed by the sun's influence, and awakes to life just in season to cut the corn in its tenderest state. In the other case, it does not emerge till the corn is out of its power. He has detected two species of equal numbers, a large and a small. Both are indifferent as to what they eat,—they eat the first thing they come at, whether corn or wormwood.

My friend next shewed me a pasture of 25 acres, in which were twenty head of cattle, mostly cows of the Durham Short Horned and Devonshire breed. These were in so good case, so sleek, and so well favored, that to one who, the past winter, had lived in the region of scarcity, it was truly a relief to the eye. The animals seemed to have an instinct of their good case and the source of it for they came around their master like so many dogs; one pulled his handkerchief from his pocket, others sought his hands and face with their gross tongues. Foremost among them was the bull denominated Jack Downing, three years old, weighing already 1200 pounds, and giving promise of celebrity perhaps equal to his namesake.

Mr. B. stated that he usually cut sixty tons of hay, and was in most successful use of the patent revolving horse rake. With a horse and boy he does the work of six men with the common rake or from two to three acres per hour. He says, that to adapt the rake to rough ground, it is only necessary to make the rake shorter—say six feet instead of ten. He deplores the dilatoriness of his fellow farmers in seizing hold of the improvements in utensils, in modes of cultivation, and in the reading of agricultural papers.

All the land of this farm is now worth $100 per acre. The average nett profit of the whole may be estimated at $10 per acre. Prices for two months past as follows: wheat $1,25; corn 75 cts.; oats, 50 cts.; hay, $10; flour, $6,25. The prospect for crops or grain in the country generally the ensuing season, is poor, and high prices are anticipated. Crops in this valley are better than in other parts. I find the severity of winter before last, made great havoc among trees in this region. Peach trees nearly all destroyed —plums, a great many—also cherries and pears, together with some forest trees. I left the premises of this plain, unpretending, but successful farmer, with as much satisfaction as I should a model farm of high scientific character; inasmuch as the former is the realization of the latter —its ultimate aim and result.

Castor Oil Plant.

We would invite the attention of farmers to experiments on the culture of the castor oil plant —knowing our soil and climate to be adapted to its growth, and believing it may be made a profitable crop in field cultivation.

The plant to which we allude, and from which castor oil is extracted, is the Ricinis, a native of the East Indies and the north of Africa, a species of which has been acclimated in the West Indies and the United States. It is generally known in this country, by the name of the "castor oil bean," and is cultivated in New Jersey, Virginia, North Carolina, and most of the states on the right bank of the Ohio river. It is also extensively cultivated in Illinois, particularly in the counties of Edwards, Randolph and Madison. The The manufacture of castor oil was commenced at Edwardsville, in the latter county, by John Adams, in 1825, in which season he made 500 gallons. His business has since increased, so that in 1831 he made about 12,500 gallons.

We have had no experience in the cultivation of this plant; but are informed there is nothing peculiar in its management, and that on good land, its product is very abundant. The beans are enclosed in capsules, divided into three cells and contain a large quantity of oleaginous matter of a white color and sweetish taste. There are three methods of extracting the oil—by expression, decoction, and by the agency of alcohol—the former of which is considered the best both on account of the quality of the oil, and the fact that a separation of the bean from the capsule is unnecessary.

The following is the process of extracting the oil adopted in Illinois, and the result is what is called "cold pressed castor oil," which is always considered best quality. The beans are well cleaned and moderately heated in a furnace, care being taken that the heat be not raised higher than can be endured by the naked hand.—They are then placed in an iron cylinder, and a follower is forced upon them by an iron, or wooden screw, of great power. The screw is turned by a horse attached to a long and large lever, precisely in the same manner that a nut mill is operated. The usual quantity of oil thus pressed out of a bushel, is about seven quarts. Not knowing the number of bushels that may ordinarily be expected from an acre, we cannot make an estimate of the product and profit of land devoted to the cultivation of this plant. We learn, however, from the Cincinnatti prices current, that the beans are selling from $1,50 to $2,50 a bushel, and castor oil is quoted in the New York prices current from to 1,75 to 2,00 a gallon. The duty on imported castor oil is 40 cents a gallon, and the quality of American cold pressed is esteemed preferable to foreign, and it invariably commands a higher price in market. Experiments on the cultivation of this valuable plant may be easily and cheaply made, and we have no doubt it would be found to be one of our most profitable crops.

Cocoons & Raw Silk will be purchased to any extent by the North Hampton Silk Company. They have contracted with Dr. Stebbins for a number of bales of raw material, consigned to him by an importing house in Boston, and are ready to purchase all raw Silk which may be offered. These facts should convince people of the earnestness of the business and that our own folks should raise trees and feed worms, rather than compel our Silk Manufacturers, to send abroad for the raw material. In a few days we hope to have some specimens of Silk for exhibition, from the looms of the Northampton Silk Company.—*Northampton Cour.*

More than a Burster!—Mr. J. A. Morton of Hadley has just sheared from a Merino Buck, eight pounds and two ounces of fine wool! Who can go ahead of Squire Morton?—*Ib.*

WILLIAM ATKINSON,
REAL ESTATE BROKER,
17, *Exchange-street, Rochester.*

BUYS and sells Farms and City Property on commission, and attends to the collection of Mortgages.

☞ Several valuable Farms for sale.

Valuable Books for Farmers.

CHAPTAL'S Agricultural Chemistry, price $1,25
Comstock on Silk, price 37 1-2 cts.
Cobb do. do.
Nuttall's Ornithology of Land Birds, price $2,50.
do. do. Water Birds, price $2,50.
Hind, Mason, and American Farriers.
Bushby on the Vine, price 50 cts.
Smith on the Honey Bee, price 37 1-2.
Fisher on the Vine, price 75 cts.
Also—Odd volumes of the Genesee Farmer.
For sale by HOYT & PORTER,

CLAIMS ON TRINITY CHURCH IN THE CITY OF NEW YORK—At a large meeting of the descendants of Anneke Jants held in the court room at Poughkeepsie, on the first day of July current, the subscribers were appointed their committee and agents, and directed to publish the proceedings of that meeting, which were as follows:

At a numerous meeting of the descendants of Anneke Jants, held at Poughkeepsie in Dutchess county, pursuant to public notice, on the first day of July 1836, Judge Trumpbour, of Saugerties in Ulster county, was called to the chair, and John Van Buren, esq. of Kingston in said county, was appointed secretary.

Mr. George Sullivan, of counsel for the heirs, being called upon to inform the meeting of the actual state and prospects of their claims, made a lucid and concise exposition of the rights of the claimants, the proceedings which had thus far been had in chancery, and presented a history of the claim from its earliest stages.

On motion it was unanimously resolved, that the descendants of Anneke Jants do unite in the prosecution of their claims against the Trinity Church of the city of New York, and persevere in it until the final decision of the highest tribunal of the state shall award them their rights, or decide that these are lost beyond recovery; and that a committee be appointed to take such measures for carrying into effect this resolution, as they may deem expedient.

Resolved, That this committee consist of three persons, and that Judge Trumpbour of Saugerties, Ulser county, Peter Oakley, esq. of Fishkill, Dutchess county, and John L. Bogardus, esq. of the city of New York, be said committee.

Resolved That said committee have full powers to carry out the objects of the foregoing resolutions, in accordance with the provisions of the agreement of the 10th of July 1830.

An agreement was drawn up and annexed to the original agreement providing for the raising of funds for the prosecution of the suit instituted by their counsel, Mr. Sullivan, and such other suits as he and said committee may deem expedient in the premises.

Resolved, That said committee have power to call meetings of the descendants of Anneke Jants, at such times and places as may be convenient, by public notice or otherwise.

Resolved, That these proceedings be published in the newspapers of this state, with a view to apprise all who are interested in these claims of the course intended to be pursued.

Jacob Trumpbour, Ch'n.
John Van Buren, Sec'y.

The subscribers, in further compliance with the wishes of the heirs assembled on this occasion, earnestly request, that all persons who are descendants from Anneke Jants, or connected by marriage with her descendants, will forward in writing their names and places of residence and their respective pedigrees, so that they may receive the circulars which the committee are preparing to send them. It has become important that all should specify, as soon as may be, their respective descents, so that their respective shares or interest in the property may be ascertained. These communications may be directed to either of the subscribers, who in return will send information from time to time, of the progress of the prosecution, its prospects, and the means relied upon for success. New York, July 7, 1836.

JACOB TRUMPBOUR
Saugerties, Ulster county.
PETER OAKLEY,
Fishkill, Dutchess county.
JOHN L. BOGARDUS,
General Land Office, 3 Clinton Hall.
Beekman street, New York.

july 15-afr7t